

**B.Tech. – VIEP – COMPUTER SCIENCE AND
ENGINEERING (BTCSEVI)**

Term-End Examination

00474

June, 2017

**BICS-015 : PRINCIPLES OF PROGRAMMING
LANGUAGES**

Time : 3 hours

Maximum Marks : 70

Note : Attempt any seven questions. All questions carry equal marks.

1. (a) What do you understand by procedure oriented and object oriented programming languages ? 3
- (b) Write and explain at least seven features of an object oriented programming language. 7
2. (a) Explain with an example 'Storage allocation of multidimensional arrays' in a computer. 5
- (b) Write and explain various 'data types' in 'Ada'. 5

3. (a) Explain the 'polymorphism' feature of C++ with an example. 5
- (b) What is 'friend function' in C++ language? Explain with suitable example. 5
4. (a) Explain 'memory allocation' using pointers in 'C' language. Compare the same using arrays in 'C' language. 6
- (b) Describe 'parameter passing' techniques in 'C' language with an example. 4
5. (a) Explain 'Multiple Inheritance' in C++ with an example. 5
- (b) What do you understand by classes? Explain in brief all types of classes with example. 5
6. (a) Define and explain various control structures in PROLOG. 5
- (b) Write and explain at least five features of LISP. 5
7. (a) Write and explain the four divisions of COBOL program with an example. 8
- (b) Write the syntax of 'PERFORM' statement of COBOL language with an example. 2

8. (a) Explain how JAVA is a platform independent language. 2
- (b) Write and explain the object oriented feature of JAVA. 8
9. Write short notes on the following :
- (a) 4th Generation Programming Languages 3
- (b) Iteration versus Recursion 3
- (c) Private versus Protected classes with one example each 4
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